

Serial No. 10/762,286

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1, 2, 4, 5, 8, 11, 13, 14, 16, 17, 19, 21, 22, 24, 25, 28, and 31 and ADD new claims 33-35 in accordance with the following:

1. (Currently Amended) A printing method of printing a control strip including patches on a printed matter, measuring color densities of patches, and performing printing control based on the color densities, wherein

the patches are arranged in the same direction as the arrangement of ink keys of a printing device,

the patches include four typical patches of black, cyan, magenta, and yellow at dot area rates of ~~[[60]]~~80 to 85% in ~~[[the]]~~a width of each ink key, and

the printing control is the control for keeping the color densities of the four typical patches of the width of each ink key in predetermined color-density ranges.

2. (Currently Amended) The printing method according to claim 1, wherein the dot area rates of the four typical patches ~~range between 75 and 85%~~ are 80%.

3. (Original) The printing method according to claim 1, wherein the cyan and magenta typical patches are arranged at the middle of the width of each ink key.

4. (Currently Amended) A printing method of printing a control strip including patches on a printed matter, measuring color densities of the patches, and performing printing control based on the color densities, wherein

the patches are arranged in the same direction as the arrangement of ink keys of a printing device,

the patches include four typical patches of black at a dot area rate of 100%, and cyan, magenta and yellow at dot area rates of ~~[[60]]~~80 to 85% in ~~[[the]]~~a width of each ink key, and

the printing control is the control for keeping the color densities of the four typical patches

Serial No. 10/762,286

of the width of each ink key in predetermined color-density ranges.

5. (Currently Amended) A printing method of printing a control strip including patches on a printed matter, measuring color densities of the patches, and performing printing control based on the color densities, wherein

the patches are arranged in the same direction as the arrangement of ink keys of a printing device, and include four solid patches of black, cyan, magenta, and yellow at dot area rates of 100%,

the patches include four typical patches of black, cyan, magenta, and yellow at dot area rates of 60 to 85% in the width of each ink key, and

the printing control determines whether or not values obtained based on the color densities of the typical patches and the color densities of the solid patches are included in predetermined ranges on the four colors in the width of each ink key, and determines that printing is not normal when it is not determined that the values are included in the ranges.

6. (Original) The printing method according to claim 5, wherein

the control strip includes the four typical patches and the four solid patches in the width of each ink key.

7. (Original) The printing method according to claim 5, wherein

the printing control outputs an alarm and stops opening/closing control of the ink keys of the printing device, when it is determined that the printing is not normal.

8. (Currently Amended) A printing method of printing a control slip including patches on a printed matter, measuring color densities of the patches, and performing printing control based on the color densities, wherein

the patches are arranged in the same direction as the arrangement of ink keys of a printing device, and include four solid patches of black, cyan, magenta, and yellow at dot area rates of 100% and four middle patches of black, cyan, magenta, and yellow at dot area rates of 40 to 50%,

the patches include four typical patches of black, cyan, magenta and yellow at dot area rates of 60 to 85% in the width of each ink key, and

the printing control determines on the four colors whether or not values obtained based on differences between the color densities of the solid patches and the color densities of the

Serial No. 10/762,286

typical patches and differences between the color densities of the typical patches and the color densities of the middle patches are included in predetermined ranges in the width of each ink key, and determines that printing is not normal when it is not determined that the values are included in the ranges.

9. (Original) The printing method according to claim 8, wherein the control slip includes the four typical patches, the four solid patches, and the four middle patches in the width of each ink key.

10. (Original) The printing method according to claim 8, wherein the printing control outputs an alarm and stops opening/closing control of the ink keys of the printing device, when it is determined that the printing is not normal.

11. (Currently Amended) A printing method of printing a control strip including patches on a printed matter, measuring color densities of the patches, and controlling ink keys provided for a printing device based on the color densities, comprising:

measuring the color densities of four patches of black, cyan, magenta, and yellow included in ~~[[the]]~~a width of each ink key;

controlling the ink keys for keeping the color density of the patch of an optical color selected from cyan, magenta, and yellow and the color density of the patch of black in predetermined color-density ranges and keeping a value showing the balance of the color densities of cyan, magenta, and yellow patches in a predetermined range in the width of each ink key, and

controlling the ink keys for keeping the color densities of black, cyan, magenta, and yellow patches in the color-density ranges in the width of each ink key and obtaining a value showing the balance of the color densities of cyan, magenta, and yellow patches at each predetermined cycle, after the value showing the balance enters in the range.

12. (Original) The printing method according to claim 11, further comprising: controlling the ink keys for keeping the value showing the balance obtained at each predetermined cycle in the range in the width of each ink key.

13. (Currently Amended) A printed matter on which a control strip including patches is printed, wherein

Serial No. 10/762,286

the patches are arranged in the same direction as the arrangement of ink keys of a printing device under printing, and

the patches include four typical patches of black, cyan, magenta, and yellow at dot area rates of ~~60~~ 80 to 85% in ~~[[the]]~~ a width of each ink key.

14. (Currently Amended) The printed matter according to claim 13, wherein dot area rates of the four typical patches ~~range between 75 and 85%~~ are 80%.

15. (Original) The printed matter according to claim 13, wherein typical patches of cyan and magenta are arranged at the middle of the width of each ink key.

16. (Currently Amended) A printed matter on which a control strip including patches is printed, wherein

the patches are arranged in the same direction as the arrangement of ink keys of a printing device under printing, and

the patches include four typical patches of black at a dot area rate of 100% and cyan, magenta, and yellow at dot area rates of ~~60~~ 80 to 85% in ~~[[the]]~~ a width of each ink key.

17. (Currently Amended) ~~The printed matter according to claim 13,~~ A printed matter on which a control strip including patches is printed, wherein

the patches are arranged in the same direction as the arrangement of ink keys of a printing device under printing,

the patches include four typical patches of black, cyan, magenta, and yellow at dot area rates of 60 to 85% in a width of each ink key, and

the patches include four solid patches of black, cyan, magenta, and yellow at dot area rates of 100% in the width of each ink key.

18. (Original) The printed matter according to claim 17, wherein the control strip includes the four typical patches and the four solid patches in the width of each ink key.

19. (Currently Amended) ~~The printed matter according to claim 13,~~ A printed matter on which a control strip including patches is printed, wherein

the patches are arranged in the same direction as the arrangement of ink keys of a printing device under printing,

Serial No. 10/762,286

the patches include four typical patches of black, cyan, magenta, and yellow at dot area rates of 60 to 85% in a width of each ink key, and

the patches include four solid patches of black, cyan, magenta, and yellow at dot area rates of 100% and four middle patches of black, cyan, magenta, and yellow at dot area rates of 40 to 50%.

20. (Original) The printed matter according to claim 19, wherein the control strip includes the four typical patches, the four solid patches, and the four middle patches in the width of each ink key.

21. (Currently Amended) A printing control device for printing a control strip including patches on a printed matter, measuring color densities the patches, and performing printing control based on the color densities, wherein

the patches are arranged in the same direction as the arrangement of ink keys of a printing device, and

the patches include four typical patches of black, cyan, magenta, and yellow at dot area rates of ~~[[60]]~~80% to 85% in ~~[[the]]~~a width of each ink key, the printing control device comprising:
a measuring section which measures the color densities of the patches; and
a control section which performs the control for keeping the color densities of the four typical patches in predetermined color-density ranges in the width of each ink key.

22. (Currently Amended) The printing control device according to claim 21, wherein the dot area rates of the four typical patches ~~range between 75 to 85%~~ are 80%.

23. (Original) The printing control device according to claim 21, wherein the typical patches of cyan and magenta are arranged at the middle of the width of each ink key.

24. (Currently Amended) A printing control device for printing a control strip including patches on a printed matter, measuring color densities of the patches, and performing printing control based on the color densities, wherein

the patches are arranged in the same direction and the arrangement of ink keys of a printing device, and

the patches include four typical patches of black at a dot area rate of 100% and cyan, magenta, and yellow at dot area rates of ~~60~~80 to 85% in ~~[[the]]~~a width of each ink key, the

Serial No. 10/762,286

printing control device comprising:

a measuring section which measures the color densities of the patches; and

a control section which performs the control for keeping the color densities of the four typical patches in predetermined color-density ranges in the width of each ink key.

25. (Currently Amended) A printing control device for printing a control strip including patches on a printed matter, measuring color densities of the patches, and performing printing control based on the color densities, wherein

the patches are arranged in the same direction as the arrangement of ink keys of a printing device, and include four solid patches of black, cyan, magenta, and yellow at dot area rates of 100%, and

the patches include four types of typical patches of black, cyan, magenta, and yellow at dot area rates of 60 to 85% in ~~[[the]]~~ a width of each ink key, the printing control device comprising:

a measuring section which measures the color densities of the patches; and

a control section which determines on the four colors whether or not values obtained based on the color densities of the typical patches and the color densities of the solid patches are included in predetermined ranges on the four colors in the width of each ink key, and determines that printing is not normal when it is not determined that the values are included in the ranges.

26. (Original) The printing control device according to claim 25, wherein the control strip includes the four typical patches and the four solid patches in the width of each ink key.

27. (Original) The printing control device according to claim 25, wherein the control section outputs an alarm and stops opening/closing control of the ink keys of the printing device, when it is determined that the printing is not normal.

28. (Currently Amended) A printing control device for printing a control strip including patches on a printed matter, measuring color densities of the patches, and performing printing control based on the color densities, wherein

the patches are arranged in the same direction as the arrangement of ink keys of a printing device, and include four solid patches of black, cyan, magenta, and yellow at dot area rates of 100% and four middle patches of black, cyan, magenta, and yellow at dot area rates of

Serial No. 10/762,286

40 to 50%, and

the patches include four typical patches of black, cyan, magenta, and yellow at dot area rates of 60 to 85% in ~~the~~ a width of each ink key, the printing control device comprising:

a measuring section which measures the color densities of the patches; and

a control section which determines on the four colors whether or not values obtained based on differences between the color densities of the solid patches and the color densities of the typical patches and differences between the color densities of the typical patches and the color densities of the middle patches are included in predetermined ranges in the width of each ink key, and determines that printing is not normal when it is not determined the values are included in the ranges.

29. (Original) The printing control device according to claim 28, wherein the control strip includes the four typical patches and the four solid patches, and the four middle patches in the width of each ink key.

30. (Original) The printing control device according to claim 28, wherein the control section outputs an alarm and stops opening/closing control of the ink keys of the printing device, when it is determined that the printing is not normal.

31. (Currently Amended) A printing control device for printing a control strip including patches on a printed matter, measuring color densities of the patches, and controlling ink keys provided for a printing device based on the color densities, comprising:

a measuring section which measures the color densities of the patches; and

a control section which controls the ink keys respectively for keeping the color density of the patch of an optional color selected from cyan, magenta, and yellow and the color density of the black patch in predetermined color-density ranges and keeping a value showing the balance of the color densities of cyan, magenta, and yellow patches in a predetermined range in ~~the~~ a width of each ink key, and controls the ink keys respectively for keeping the color densities of black, cyan, magenta, and yellow patches in the color-density ranges in the width of each ink key and obtains a value showing the balance of the color densities of cyan, magenta, and yellow patches at each predetermined cycle, after the value showing the balance enters in the range.

32. (Original) The printing control device according to claim 31, wherein the control section controls ink keys for keeping the value showing the balance obtained at each the

Serial No. 10/762,286

predetermined cycle in the range in the width of each ink key.

33. (New) The printing method according to claim 4, wherein the dot area rates of the typical patches of cyan, magenta and yellow are 80%.

34. (New) The printed matter according to claim 16, wherein the dot area rates of the typical patches of cyan, magenta and yellow are 80%.

35. (New) The printing control device according to claim 24, wherein the dot area rates of the typical patches of cyan, magenta and yellow are 80%.